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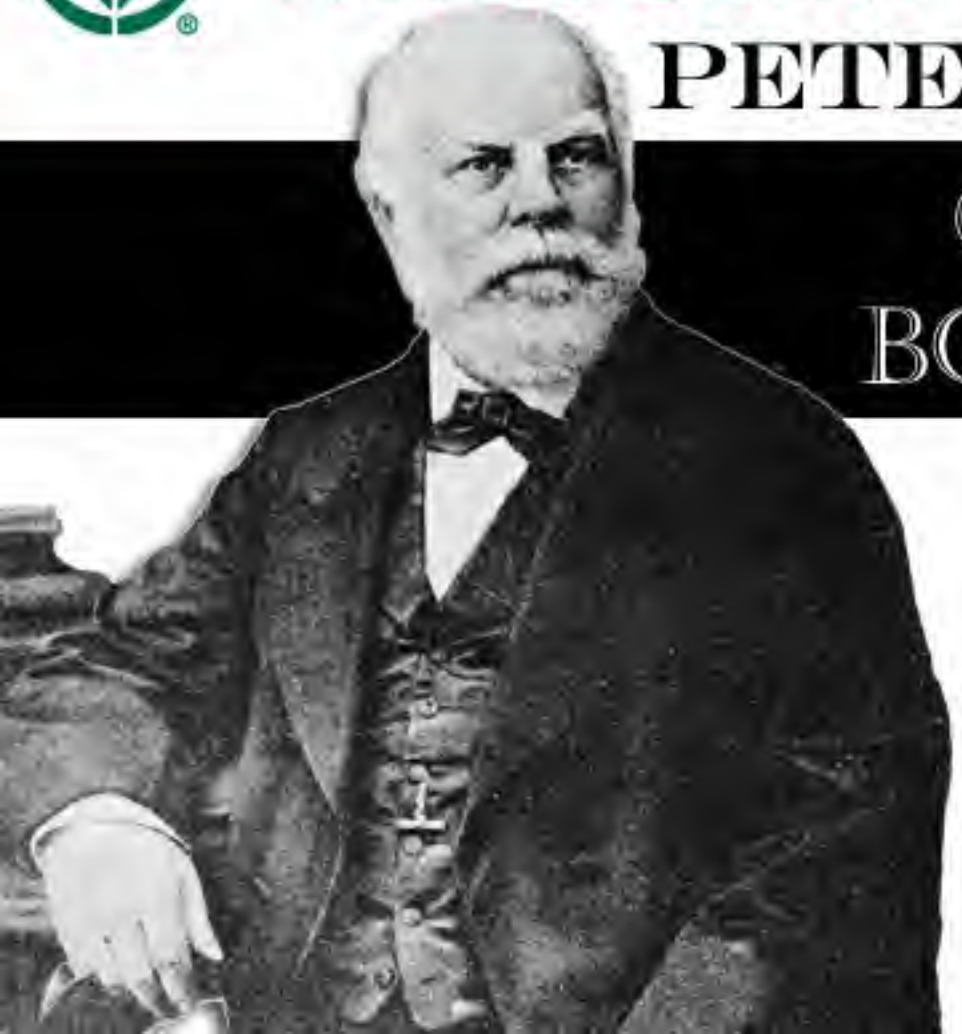

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7 tab

P. Bonatia et

35

490-6

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Pinus Pollen X415

"Pinus Bentii"

H.B. Neapol. 1858 March 8th

October 8 1863

X415

X4

upper or posterior side

X10

mostly 0.035

0.033 - 0.037

0.029

bract short, about 3 lines long, articulations early deciduous

4 scales very often

5th scale very rare

6 scales seen 3-4 times

11 scales seen once

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Druggists
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George Engelmann Papers

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Pinus Brutia Ten ! July 13 1865

Host Nepal. Cosson 1846

Pollen × 415 - very few good grains 0.036–0.039

X4

& bracts

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ALEX. LEITCH.

APOTHECARY & PHARMACEUTIST,

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

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Pinus Brutia

May 14 1879

Host bot Neapol

The typical tree!

×30

usual rise of leaves 5 periph. ducts above and 5 below. — Other leaves have fewer ducts.

hypoderm within sheath

smaller leaf with only 2 ducts on upper side

×60

×30

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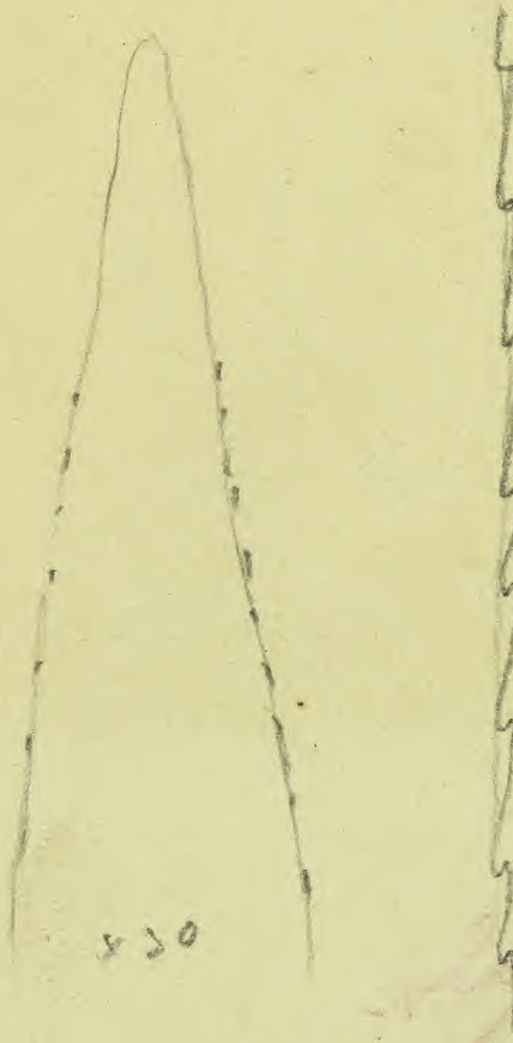
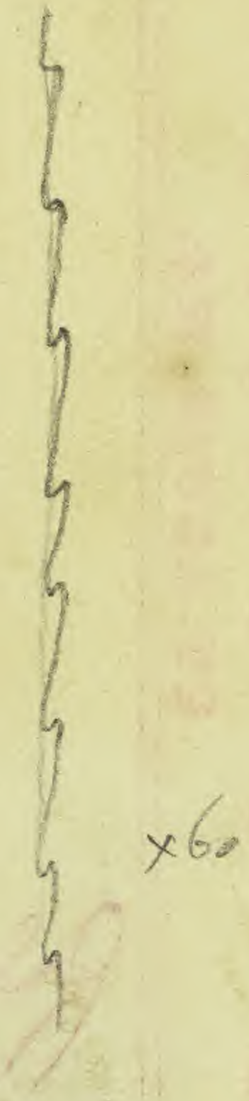
Rivus Kalepaaiki
Iaoao, Kahoky

May 12 1919

numerous ducts, often 9
peripheral, almost or entirely
without hypoderm surrounding
hypoderm varying under epider-
and very little about bundles of
vessels





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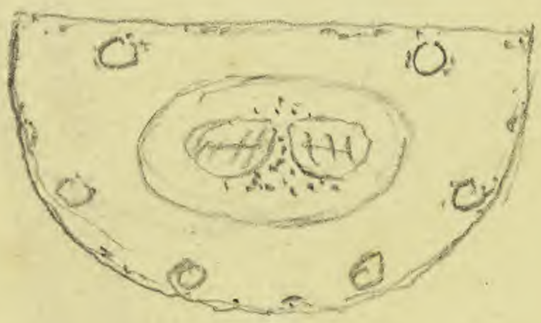
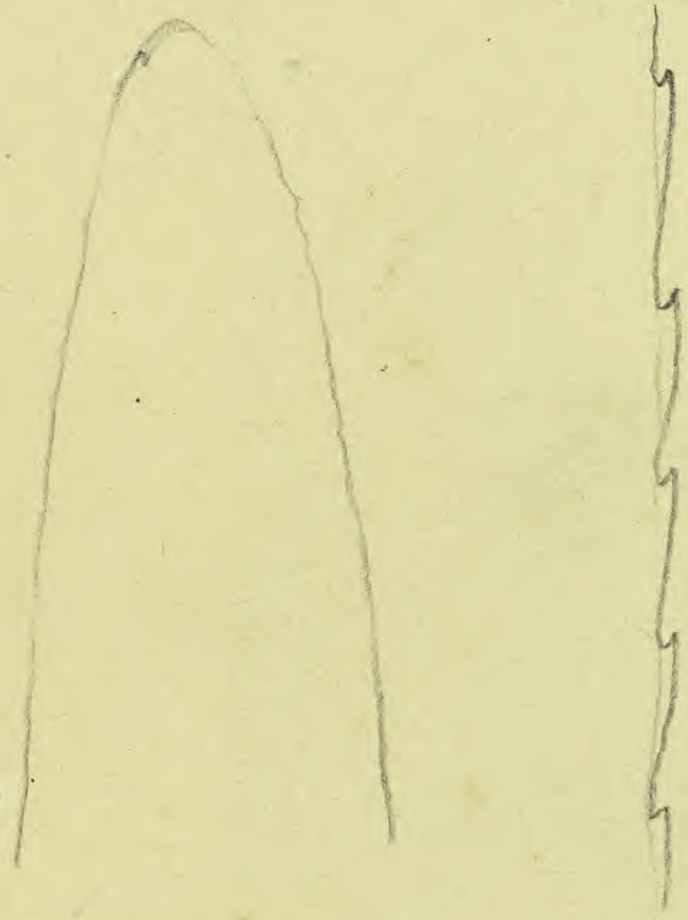
Pinus Halepensis
Naples 1869

May 12 1879





ducts peripherical
and all around
hypoderm spring
around ducts and under
epidermis, its cells
thicker than inside

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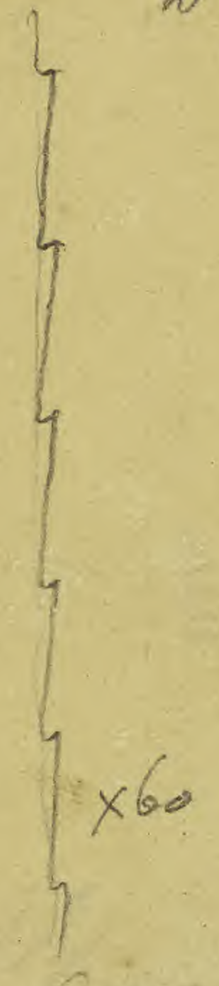
May 12 1879

Pinus Halepensis
young trees, Montboron
near Nizza 1869
Naples

only two ducts on
upper side — peripheral
without any or with very
little (rarely) hypoderm.
hypoderm openly under
epiderm.



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"Pinus maritima"

May 12 1879

Taurus, Kotschy

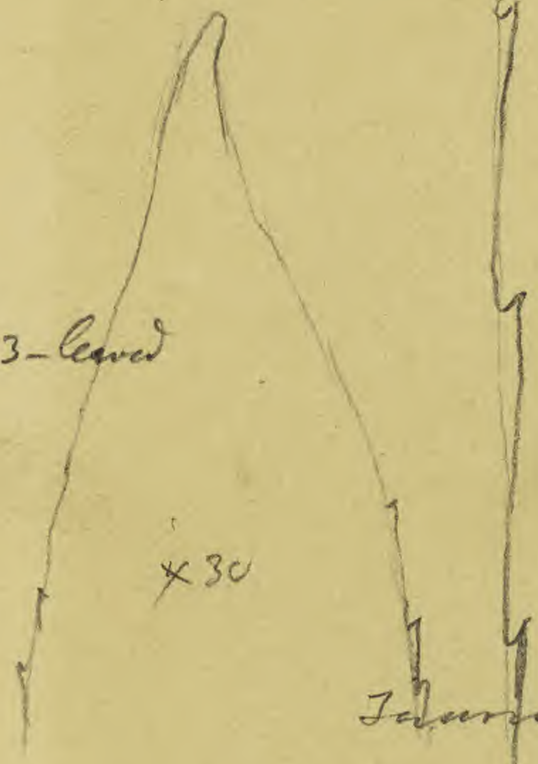
×30

760 Cyprus, Kotschy

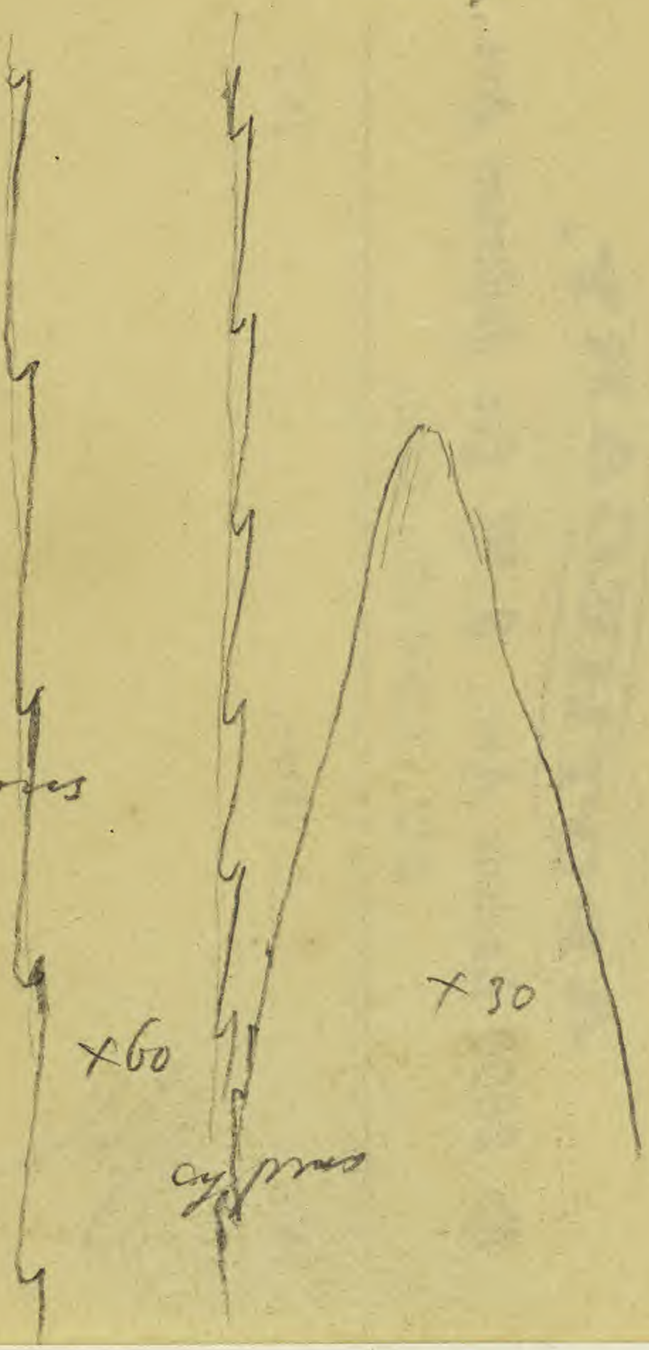
peripheral ducts above and below
surrounded by hypoderm - sam abundant with Heath.

rarely 3-leaved

×30



Taurus



×60

×30

Cyprus

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May 14 1879

P. Pyrenaica

Orto dei Semplici, Florence

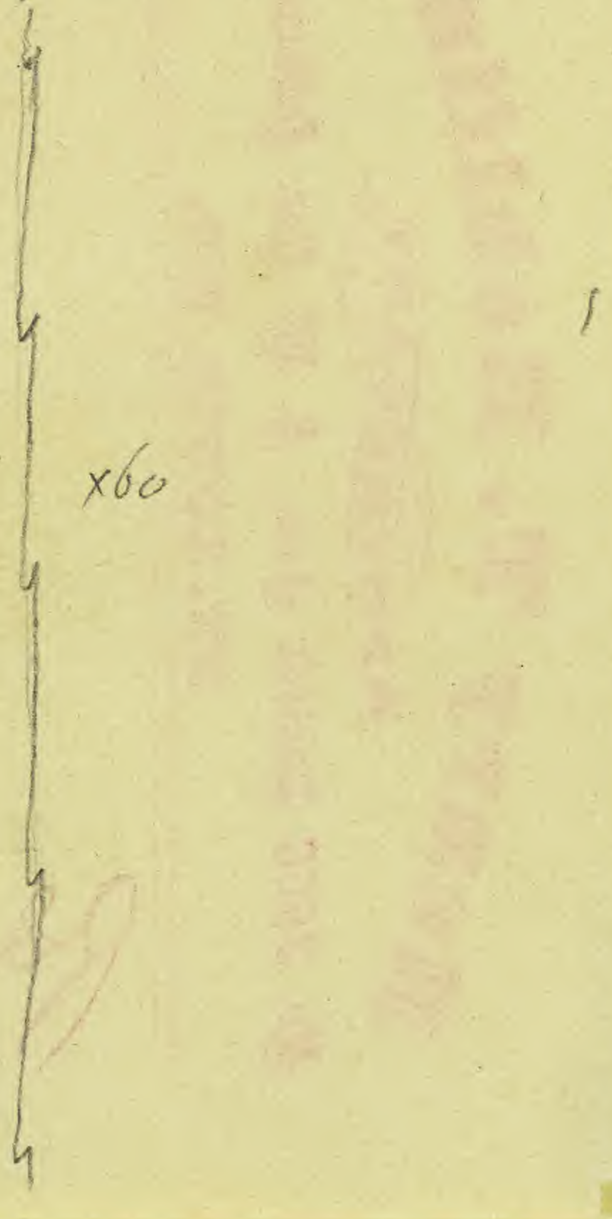
(haec sp. vitæ fuit in Herb. 1869

×20

peripheral ducts,
surrounded by hypoderm
cells – hypoderm generally
well developed, in Third bundles
few cells in Sheath.

×30

×60



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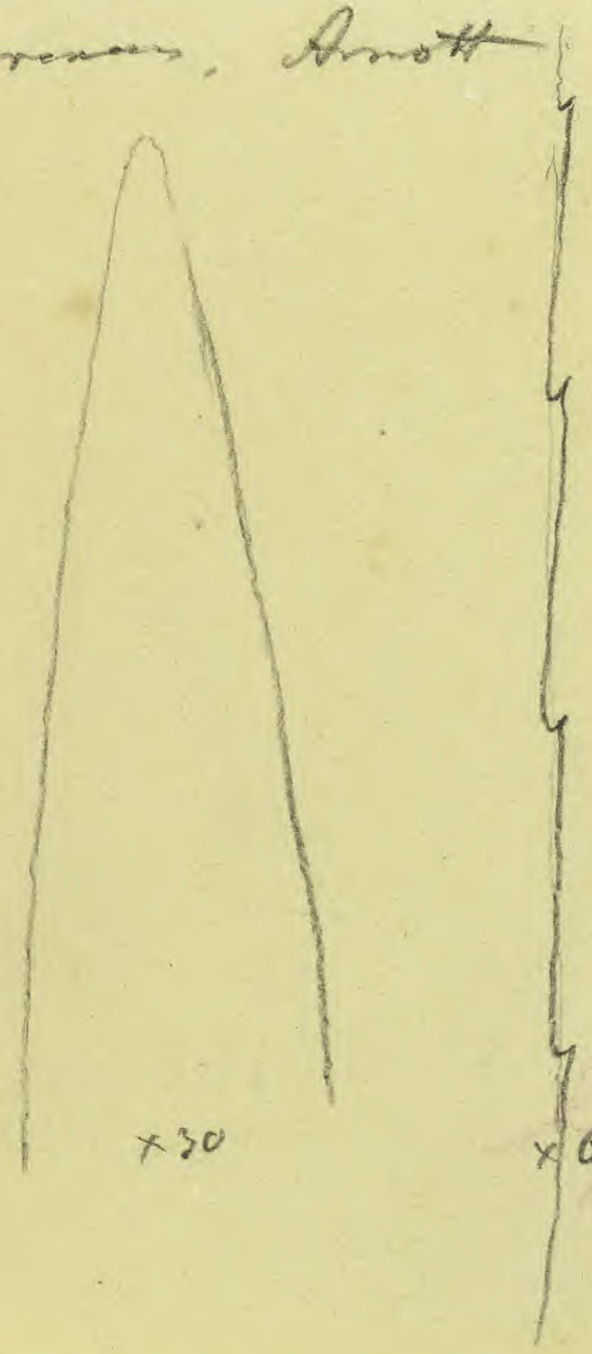
May 14 1879

P. Pyrenaica

Pyrenees. Arnott

x 30

the two upper lateral ducts are evidently the largest, the primary ones hypoderm + sheath but very little under epiderm even scarcely any in the angles



x 30

x 60

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"Pinus Pithyusa"

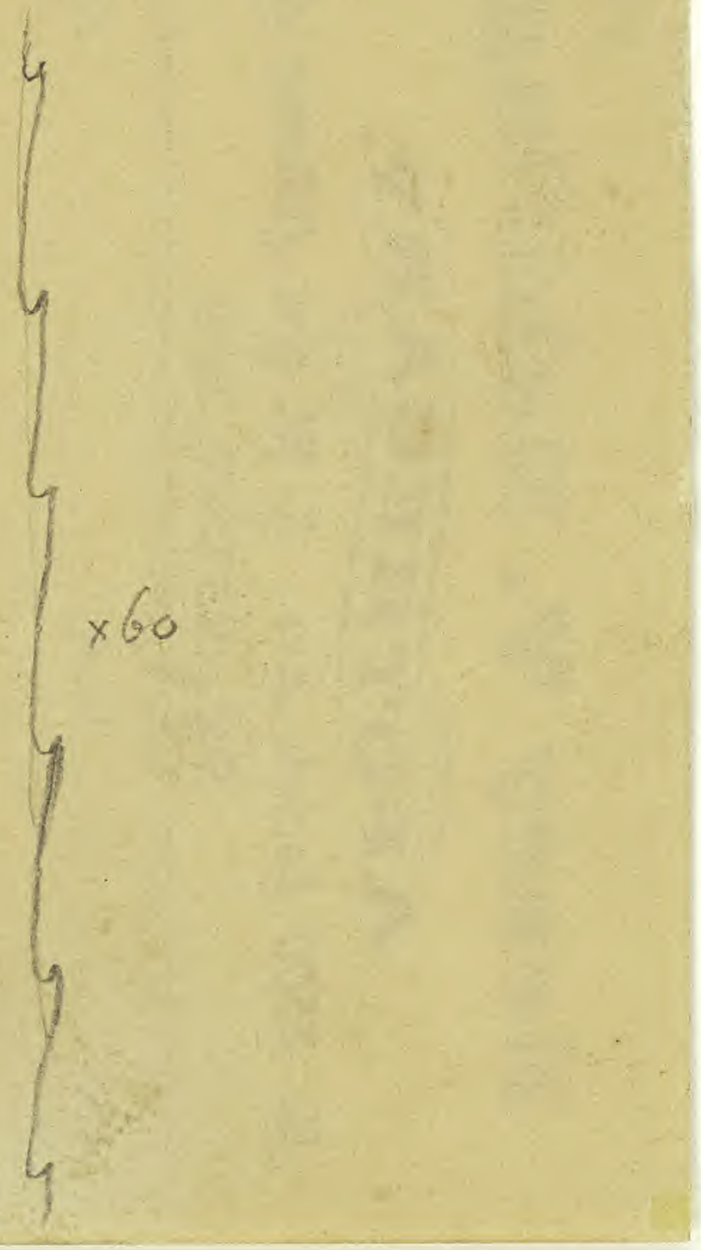
Coll Hort Bot Neapolit

May 12 1879

x 50

four or more peripheral
ducts — principal one on
upper surface — more or
less surrounded by strength.
cells — many bundles of these
around, and a great many within sheath
and separating the bundles of vessels

x 30



x 60

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